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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,796	11/13/2003	Ulrich Dzialis	22709	7864

535 7590 06/29/2005

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EXAMINER

RAO, G NAGESH

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/712,796	Applicant(s) DZIALAS ET AL.	
	Examiner G. Nagesh Rao	Art Unit 1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 6/6/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,7-10 and 12-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7-10 and 12-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Claim Rejections - 35 USC § 103

1. Claims 1-2, 4-5, 7-10, and 12-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Buehning (US Patent No. 5,632,938) in view of Mende (US Patent No. 5,017,112).

In a molding apparatus Buehning 938 teaches an apparatus with a melt-blowing die having a presettable air-gap that is generally used in polymer processing, where there are guide-flanks as seen in figure 4 elements 26 and 58 where they are at an acute angle as indicated also in Column 8 Lines 59-65, where the internal angle of the nosepiece is between 45 to 90 degrees (falls within range of acute angle by definition). Also the prior art teaches a respective member shaped to fit into said nozzle bore received therein (Figure 4, Element 69).

Buehning 938 also teaches plurality of passageways for compressed air flow as indicated in figure 4 elements 27 and 28 which are air knives that allow for air to flow through passages 54 and 55 (Column 7 Lines 17-31 and 8 Lines 45-50). The air flow is there to cool down the resin flowing out of the melt-blown orifice tip (Figure 4 Elements 26 and 71).

However Buehning 938 lacked the multiplicity of bores within the elongated nozzle bore body, which is in essence a melt-blow die cavity.

In an apparatus related to melt blowing, Mende 112 teaches a melt-blowing cavity die including a plurality of capillaries and orifices which is used to obtain more than one flow of a molten resin from the tip portion of the capillary die by providing a plurality of notches on the tip portion of the die (See Figures 1-3).

It would be obvious to one skilled in the art to modify the device taught by Buehning 938 with the teachings of Mende 112, to take advantage of the teachings set forth by Mende 112 for the capability of achieving a higher discharge amount and stability without an increase in the fiber's diameter as extruded from the die tip.

2. Upon review of the prior art, examiner and disagrees that there is a respective member shaped to fit into said bores as taught by Buehning 938 and mentioned earlier that Element 69 as shown in Figure 4 reads on that respective member fit within a bore cavity making up the nozzle. Furthermore it would be obvious to modify the Buehning 938 device with the manifold taught by new referenced art Mende 112 to prevent leakage and waste of material.

Furthermore applicant contends that the purpose of their device being drawn towards thermoplastic synthetic resin makes it unique. It should be noted that

materials worked upon in an apparatus bear no weight to the structural limitation, since it is viewed as a recitation of intended use.

Finally applicant argues an orifice density of 100 per centimeters or more, which is inconsequential to the claim language since the applicant in the claims never specifically claimed those limitations.

Conclusion

Applicant's arguments filed 6/6/2005 have been fully considered but they are not persuasive.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will

be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to G. Nagesh Rao whose telephone number is (571) 272-2946. The examiner can normally be reached on 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GNR


ROBERT DAVIS
PRIMARY EXAMINER
GROUP 1300 / 700

6/26/05